

VALVE ASSEMBLY, IN PARTICULAR FOR A FUEL INJECTION SYSTEM  
OF AN INTERNAL COMBUSTION ENGINE

Abstract

A valve assembly suitable in particular for a fuel injection system of an internal combustion engine is proposed, which includes an adjustably disposed valve element, an actuator unit, in particular a piezoelectric actuator unit, for adjusting the valve element, and a hydraulic force transmission chamber disposed in the force transmission path between the actuator unit and the valve element. For diverting at least one hydraulic filling stream, to be delivered to the force transmission chamber for filling it, from a hydraulic mainstream, a hydraulic pressure distributor assembly (50b, 52b) is provided, which has a conduit system (46b, 48b) that is embodied in a conduit housing (14b) and has both a main conduit (46b), carrying the hydraulic mainstream, and at least one filling conduit (48b), branching off from the main conduit (46b) and carrying the hydraulic filling stream. The pressure distributor assembly (50b, 52b) forms one hydraulic throttling region (50b, 52b) for the hydraulic mainstream each on both sides of the branching point of the filling conduit (48b) from the main conduit (46b). At least one of the throttling regions (50b, 52b) is embodied as a throttle bore. (Fig. 3)